Listing of the Claims:

The following is a complete listing of all the claims in the application, with an indication of the status of each:

1-6. (Canceled)

7. (Withdrawn) A surface treatment apparatus according to Claim 1, further comprising a treatment control unit which controls treatment conditions of at least one of the sheet heating unit and the sheet cooling unit.

8. (Withdrawn) A surface treatment apparatus according to Claim 7, wherein the treatment control unit comprises:
a magazine ID identification unit which identifies a magazine ID of a magazine housing the sheet; and
a treatment conditions selecting unit which selects a treatment condition corresponding to the magazine ID identified by the magazine ID identification unit.

9. (Withdrawn) A surface treatment apparatus according to Claim 8, wherein the treatment condition selecting unit selects treatment conditions from among plural treatment modes comprising at least one selected from a heating temperature in the sheet heating unit, a pressure force, a heating time, and a pressurizing time, a cooling temperature in the sheet cooling unit, and a cooling time.

10. (Withdrawn) A surface treatment apparatus according to Claim 9, wherein the magazine ID is assigned for each sheet type.

11. (Withdrawn) A surface treatment apparatus according to Claim 7, wherein the treatment control unit comprises an operation screen display unit which displays a screen permitting selection of treatment conditions.

12. (Withdrawn) A surface treatment apparatus according to Claim 11, wherein the operation screen display unit displays a screen which permits selection of a quality comprising at least one of gloss and matt as the quality after surface treatment of the sheet.

13. (Withdrawn) A surface treatment apparatus according to Claim 11, wherein the operation screen display unit displays a screen which permits selection of a sheet type.

14. (Withdrawn) A surface treatment apparatus according to Claim 1, wherein the sheet heating unit heats the sheet in contact with the contact member.

15. (Withdrawn) A surface treatment apparatus according to Claim 14, wherein the sheet heating unit heats to a temperature equal to or higher than the softening point of a thermoplastic resin in the thermoplastic resin layer.

16. (Withdrawn) A surface treatment apparatus according to Claim 15, wherein the sheet heating unit heats the sheet to a temperature of from 80 °C to 120 °C.

17. (Withdrawn) A surface treatment apparatus according to Claim 15, wherein the contact member pressures the sheet to a pressure of from 7 kgf/cm^2 to 20 kgf/cm^2.

18. (Withdrawn) A surface treatment apparatus according to Claim 15, wherein the sheet cooling unit cools to a temperature less than the softening point of a thermoplastic resin in the thermoplastic resin layer.

19. (Withdrawn) A surface treatment apparatus according to Claim 15, wherein the sheet heating unit comprises:

the endless belt; and

a pair of heat rollers disposed so as to place the endless belt in pressure contact from its inner side and outer side.

20. (Withdrawn) A surface treatment apparatus according to Claim 15, wherein the sheet cooling unit is disposed between the pair of heat rollers and the rotation roller suspending the endless belt free to rotate together with the pair of heat rollers, and in the vicinity of the endless belt.

21. (Withdrawn) A surface treatment apparatus according to Claim 20, wherein the treatment control unit adjusts a cooling time due to the sheet cooling unit by varying a distance between the pair of heat rollers and the rotation roller, so as to vary the time for which the sheet and endless belt are in contact.

22. (Withdrawn) A surface treatment apparatus according to Claim 21, wherein the distance between the pair of heat rollers is varied by displacing the rotation roller and a suspension roller which suspends the endless belt free to rotate together with the rotation roller.

23. (Withdrawn) A surface treatment apparatus according to Claim 20, wherein the sheet cooling unit cools the sheet by blowing cold air.

24. (Withdrawn) A surface treatment apparatus according to Claim 20, wherein the treatment control unit adjusts a cooling temperature due to the sheet cooling unit by varying a blowing rate of the cold air produced by the sheet cooling unit.

25. (Withdrawn) A surface treatment apparatus according to Claim 15, wherein the sheet heating unit comprises:

an inner heat roller disposed inside the endless belt which suspends the endless belt together with a rotation roller disposed on the inner side of the endless belt so that the belt is free to rotate; and

an outer heat roller disposed outside the endless belt which grips the endless belt together with the inner heat roller so that the belt is free to rotate.

26. (Withdrawn) A surface treatment apparatus according to Claim 1, wherein the sheet heating unit comprises a sheet preheating part which preheats the sheet and the apparatus transfers a surface quality of the contact member to the sheet heated by the sheet preheating part.

27. (Withdrawn) A surface treatment apparatus according to Claim 26, wherein the sheet preheating part heats the sheet while the sheet treatment surface is in contact with the endless belt.

28. (Withdrawn) A surface treatment apparatus according to Claim 27, wherein the sheet preheating part is disposed on the roller surface of the inner heat roller via the endless belt.

29. (Withdrawn) A surface treatment apparatus according to Claim 27, wherein the sheet preheating part is disposed on the rotating endless belt, and further upstream than the inner heat roller and the outer heat roller.

30. (Withdrawn) A surface treatment apparatus according to Claim 27, wherein the sheet preheating part comprises a transport unit which transports the sheet while in contact with the endless belt.

31. (Withdrawn) A surface treatment apparatus according to Claim 30, wherein the transport unit comprises a heating mechanism.

32. (Withdrawn) A surface treatment apparatus according to Claim 31, wherein the transport unit comprises:

a contact belt which brings the sheet into contact with the endless belt; and

rotation rollers disposed on an inner side of the contact belt which suspend the belt such that it is free to rotate.

33. (Withdrawn) A surface treatment apparatus according to Claim 32, wherein one of the rotation rollers is the outer heat roller.

34. (Withdrawn) An image recording apparatus comprising:
an image recording unit which forms an image on a sheet; and
a surface treatment unit which performs surface treatment on the sheet, wherein the surface treatment unit is a surface treatment apparatus comprising:

a sheet heating unit which heats a sheet having at least a base, a thermoplastic resin layer, and an image recording layer on the base;

a contact member; and

a sheet cooling unit which cools the sheet while in contact with the contact member,

wherein the apparatus transfers a surface quality of the contact member to a surface of the image recording layer and an interface of the thermoplastic resin layer facing the image recording layer of the sheet.

35. (Withdrawn) An image recording apparatus according to Claim 34, wherein the image recording unit records the image on the sheet whereupon surface treatment has been performed by the surface treatment unit.

36. (Withdrawn) An image recording apparatus according to Claim 34, wherein the surface treatment unit performs surface treatment on the sheet whereupon the image has been formed by the image forming unit.

37. (New) A method of surface treatment, comprising:

providing a sheet comprising at least a base, a thermoplastic layer disposed on the base, and an image recording layer disposed on the thermoplastic resin layer, arranged to have an interface between a surface of the image quality recording layer and an interface of the thermoplastic resin layer facing said surface of image recording layer;

providing a contact member having a surface quality;

heating the sheet, including heating the thermoplastic resin layer;

transferring, by the contact member, the contact member surface quality to the surface of the image recording layer and to the interface of the thermoplastic resin layer facing the image recording layer of the sheet; and

cooling the sheet while in contact with the contact member.

38. (New) The method of surface treatment according to Claim 37, wherein said providing a contact member having a surface quality comprises:

providing a plurality of contact members having corresponding respective, mutually different, surface qualities;

selecting a contact member having a desired surface quality from among said plurality of contact members.

39. (New) The method of surface treatment according to Claim 38, wherein the contact members are from the group consisting of a roller, an endless belt, and a texture sheet.

40. (New) The method of surface treatment according to Claim 38, wherein said different surface qualities include a gloss quality, a matt quality and an embossed quality.

41. (New) The method of surface treatment according to Claim 38, wherein said selecting includes receiving a user information identifying the surface quality of the selected contact member.

42. (New) The method of surface treatment according to Claim 41, wherein the providing a plurality of contact members having corresponding respective, mutually different, surface qualities includes providing a contact member selecting unit having said plurality of different contact members, and

wherein the selecting is carried out by the contact member selecting unit based on the user information received.

43. (New) The method of surface treatment according to Claim 42, wherein the contact member selecting unit includes a belt having a plurality of different surface patterns at a respective plurality of positions of the belt,

wherein said selecting a contact member having a desired surface quality includes detecting a position of the belt associated with the desired surface quality, and

wherein the selecting is carried out based on the detecting and on the user information received.